

Abstract

An electrochemiluminescence cell comprising an electrode capable of inducing an electrochemiluminescence-active species to electrochemiluminesce. The electrode is preferably made of rhodium, iridium or an alloy of platinum, rhodium or iridium alloyed with an alloy material comprising a transition element. The electrode may be used as counter electrode and/or as a working electrode in the electrochemiluminescence cell. The cell preferably includes a counter electrode and a support attached to the counter electrode. The support comprises a transparent portion in optical registration with the working electrode. The counter electrode may include one or more field extending elements interposed between the transparent portion and the working electrode. The field extending element is preferably a ladder or a grid.